

**ABSTRACT OF THE DISCLOSURE**

An irrigation system for a medical device. The irrigation system may include a pump that can pump 5 irrigation fluid from a reservoir through an irrigation line. The system may further have a controller coupled to the pump and an accumulator pressure sensor that senses the pressure of the irrigation line. The controller can vary the speed of the pump in response to 10 a change in the line pressure to control the irrigation line pressure. Additionally, the controller can monitor the fluidic resistance of the system by determining the pump speed and corresponding flowrate of the pump. The controller can provide one or more safety output signals 15 if the fluidic resistance exceeds a threshold value(s).